

Appl. No. 10/770,258
Examiner: CHEN, WEN YING PATTY, Art Unit 2871
In response to the Office Action dated April 11, 2005

Date: July 11, 2005
Attorney Docket No. 10113711

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 1, line 21 with the following amended paragraph:

In FIGS. 2 and 4, the flexible circuit board 200 has a plurality of lead wires 230 and an insulating substrate 240. The lead wires 230 connect all the LEDs 210 and the Zener diodes 220 to the port 250. The insulating substrate 240 is plastic and encloses the lead wires 230.

Please cancel the paragraphs beginning on page 3, line 13, and ending on page 3, line 24, describing FIGS. 4-8.

Please add the following new paragraphs beginning on page 3, line 13:

Fig. 4 depicts a liquid crystal module (F) of a first embodiment of the present invention;
Fig. 5 is a plane view of a flexible circuit board (400) of Fig. 4;
Fig. 6 is a cross-section of the flexible circuit board (400) according to line (I-I) in Fig. 5;
Fig. 7 is a plane view of a liquid crystal module (F') of a second embodiment of the present invention;
Fig. 8 is a plane view of a flexible circuit board (400') of Fig. 7; and

Please add the following new paragraph beginning on page 4, line 2, before the sentence beginning with "Referring to Fig. 7":

Fig. 4 depicts a liquid crystal module F of a first embodiment of the present invention, Fig. 5 is a plane view of a flexible circuit board 400 of Fig. 4. Fig. 6 is a cross-section of the flexible circuit board 400 according to line I-I in Fig. 5. Fig. 7 is a plane view of a liquid crystal module F' of a second embodiment of the present invention, and Fig. 8 is a plane view of a flexible circuit board 400' of Fig. 7.

Please replace the paragraph at page 4, line 2 with the following amended paragraph:

Referring to Fig. 4 ~~Fig. 7~~, in a first embodiment of the invention, a liquid crystal module F comprises a rectangular body 300, a flexible circuit board 400 and a port 450. The flexible circuit

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board 400 is electrically coupled to the port 450 and disposed on the body 300. The flexible circuit board 400 has two LEDs 410 and two Zener diodes 420, with one LED 410 and one Zener diode 420 paired and located at two different sites of the flexible circuit board 400. In the present invention, the liquid crystal module F can be a liquid-crystal display of a mobile phone or a personal digital assistant (PDA), and the body 300 is made of plastic.

Please add the following new paragraph beginning on page 5, line 8, after the sentence ending with "also be effectively reduced":

Referring to Figs. 7 and 8, in the second embodiment of the invention, a liquid crystal module F' comprises a rectangular body 300, a flexible circuit board 400' and a port 450. The flexible circuit board 400' is electrically coupled to the port 450 and disposed on the body 300. The flexible circuit board 400' has two LEDs 410 and two Zener diodes 420, with one LED 410 and one Zener diode 420 paired and located at two different sites of the flexible circuit board 400'. As in the first embodiment, the liquid crystal module F' can be a liquid-crystal display of a mobile phone or a personal digital assistant (PDA), and the body 300 is made of plastic.

Please replace the paragraph at page 5, line 8 with the following amended paragraph:

~~Referring to Fig. 8, in a second embodiment of the invention, a flexible circuit board 400' is also coupled to the port 450 and disposed on the body 300 mentioned in the first embodiment. The flexible circuit board 400' of the second embodiment differs from the flexible circuit board 400 in that the LED 410 and the Zener diode 420 correspond to each other located on different sides (440S1, 440S2) 440S1, 440S2 of the insulating substrate 440.~~

Please replace the paragraph at page 5, line 16 with the following amended paragraph:

In Fig. 9, the insulating substrate 440 has a first side 440S1, a second side 440S2, and a plurality of openings W and W'. The openings W are formed on the first side 440S1 and the openings W' on the second side 440S2. With the openings W, W', the lead wires 430 enclosed by the insulating substrate 440 is exposed, so that the pins 411 of the LED 410 can be connected to the lead wires 430, 430 through the openings W respectively, and the pins 421 of

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the Zener diode 420 can be connected to the lead wires 430, 430 through the openings W respectively. That is to say, the LED 410 and the Zener diode 420 are disposed on the lead wires 430 in parallel but arranged on different sides (440S1, 440S2) 440S1, 440S2 of the insulated substrate 440. A welded point 435 is formed on the intersection of the pin 411 of the LED 410, the lead wire 430 and the pin 421 of the Zener diode 420, so that the LED 410 and the Zener diode 420 can be firmly coupled to the lead wire 430.